Frequently Asked Questions

Monitoring and Reporting Annual Emissions and Tonne km Data for EU Emissions Trading

Dutch Emissions Authority

1.0

July 2009
# Table Of Contents

Disclaimer .................................................................................................................. 3  
Latest information ................................................................................................. 3  
References ............................................................................................................. 3  

Frequently asked questions ..................................................................................... 4  
Version Monitoring Plan Templates ....................................................................... 4  
Scope EU ETS Directive .......................................................................................... 4  
Section 1 MP AE and TK Template: Update Monitoring Plan ............................... 6  
Section 2 MP AER and TK Template: Identification of aircraft operator ............. 7  
Section 4 MP AER and TK Template: Emission sources and fleet characteristics .... 7  
Chapter 3 and Annex G Guidance: How to set up your monitoring methodology and internal procedures .................................................................................. 8  
Section 5 MP TK Template: Distance .................................................................... 8  
Section 6 MP TK Template: Payload (passengers and checked baggage) .......... 9  
Section 6 MP TK Template: Payload (freight and mail) ....................................... 9  
Section 4 MP AE Template: Emission sources and fleet characteristics ............ 10  
Section 6 MP AE Template: Calculation of fuel consumption .............................. 10  
Section 7 MP AE Template: Uncertainty ............................................................... 11  
Section 8 MP AE Template: Emission factors ....................................................... 12  
Section 9 MP AE Template: Small aircraft operators .......................................... 13  
Section 10 MP AE Template: Data gaps ............................................................... 13  
Chapter 1 Guidance: Allocation of free allowances ........................................... 13  
Confidentiality ...................................................................................................... 14  
Reporting ............................................................................................................. 14
Disclaimer
These Frequently Asked Questions were compiled to help aircraft operators in interpreting EU ETS aviation monitoring requirements. PricewaterhouseCoopers was commissioned by the Dutch Emission’s Authority to draft these Frequently Asked Questions.

The answers to the questions laid down in this document reflect the opinion and interpretation of the Dutch Emissions Authority. Please note that it is not a legally binding document and that national legislation will always take precedence. This document should be read along with the Dutch Regulation Monitoring and Reporting Emissions Trading as well as EU ETS Aviation Guidance Monitoring and Reporting Annual Emissions and Tonne Km for Emissions Trading.

Latest information
The website of the Dutch Emissions Authority http://www.emissieautoriteit.nl/ contains more guidance on the impact of EU ETS Aviation requirements for your airline.

References
- Guidance for the Aviation Industry: Monitoring and Reporting Annual Emissions and Tonne km Data for EU Emissions Trading (hereinafter: guidance)
- Monitoring template annual emissions (hereinafter: MP AE Template)
- Monitoring template tonne km data (hereinafter: MP TK Template)
Frequently asked questions

Version Monitoring Plan Templates

Which version of monitoring plan template do you have to use?
The Dutch Emissions Authority accepts monitoring plans drafted based on draft monitoring templates published by Commission on 11 June 2009 and later versions approved by the European Commission and published at the Commission’s website. The templates can be found at Commission’s website [http://ec.europa.eu/environment/climat/emission/mrg_templates_en.htm](http://ec.europa.eu/environment/climat/emission/mrg_templates_en.htm).

Scope EU ETS Directive

How can you determine whether you fall under the EU ETS Emissions Trading Scheme?
The Dutch Emissions Authority has published a decision tree which you can use to help determine whether you fall under the scope of the EU ETS Emissions Trading Scheme. The decision tree can be found at the website of the Dutch Emission Authority [http://www.emissieautoriteit.nl/english/aviation/criteria-for-participation](http://www.emissieautoriteit.nl/english/aviation/criteria-for-participation).

Are military flights performed by civil airline covered by the EU ETS Directive?
Military flights means flights directly related to the conduct of military activities. Military flights performed by civil registered aircraft are not covered by the exemption in EU ETS Directive and should therefore be monitored and reported. Civil flights performed by military aircraft are also not exempted under EU ETS Directive. The flight plan is the determining factor. Flights with the CRCO exemption code M or X are exempted military flights (please see Annex A Guidance).

Do you have to monitor and report fuel consumption of a return to ramp (RTR) flight?
A return to ramp flight is a flight performed by an aircraft departing from an airport and coming back to that same airport. A flight that terminates at the same airport from which the aircraft has taken off because of for example technical reasons can be regarded as a circular flight provided no intermediate landing has been made. Circular flights are excluded from the scope of EU ETS Directive and the fuel consumption of that particular flight does not have to be monitored and reported since it is out of EU ETS scope. Return to ramp flights are therefore excluded from the scope of EU ETS if no intermediate landing has taken place.

To what extent are positioning flights covered by EU ETS?
Annex A of the guidance indicates which positioning flights are covered by EU ETS. It lays down the text of the Commission Guidelines on the interpretation of Annex I activities.

Are you a commercial air transport operator if you only fly aircrafts without transporting passengers, freight or mail?
A first indication of whether you are a commercial air transport operator is whether you have an Air Operator’s Certificate (AOC). All commercial air transport operators must hold an AOC under Part I of Annex 6 to the Chicago Convention. If you do not have such a certificate you are not a commercial air transport operator for the purpose of the scheme.

If you hold an AOC it is likely that you are a commercial operator. The certificate itself should confirm whether this is the case. Possessing an AOC is a strong indicator of commercial status but the final determinant will be whether the operator meets the definition of a commercial air transport operator set out in article 3 (p) EU ETS Directive. Commercial air transport operator means an operator that, for remuneration, provides scheduled or non-scheduled air transport services to the public for the
carriage of passengers, freight or mail. This means that if you do not transport passengers, freight or mail but only fly aircrafts, you do not meet this definition and would not be considered as commercial air transport operator.

**How should you identify test and training flights and prove to the Dutch Emissions Authority that these flights are exempted?**

According to Annex I (f) EU ETS Directive 2008/101 the following training flights are exempted from the scope of EU ETS: training flights performed exclusively for the purpose of obtaining a licence, or a rating in the case of cockpit flight crew where this is substantiated by an appropriate remark in the flight plan. The training flight cannot serve for the transport of passengers and/or cargo or for the positioning or ferrying of the aircraft.

In any case flights with the CRCO exemption code 'T' and flights identified with RMK/"Training flight" in field 18 of the flight plan are presumed to be exempted under subparagraph (f). This does not mean that only flights with exemption codes T and flights identified with RMK/"Training flight" in field 18 of the flight plan are to be exempted.

In fact all flights falling under the meaning of Annex I (f) EU ETS Directive are to be excluded. This also applies to flights that are substantiated by another appropriate remark in the flight plan (such as for example an X in field 8 of the flight plan) provided this remark is consistently used by you to identify training flights. Please note that there could be discrepancies between Eurocontrol data and internal data if other exemption codes or remarks in the flight plans are used to identify training flights compared to the CRCO exemption code 'T' and flights identified with RMK/"Training flight" in field 18 of the flight plan.

**What to do if you are not on the list of aircraft operators published by the European Commission but you fall under the scope of the EU ETS Directive?**

Aircraft operators performing an aviation activity listed in Annex I to the Directive are covered by the EU ETS whether or not they are on the list of aircraft operators. This means that the list is not the determining factor for assessing whether you fall under the EU ETS scheme and whether you have to meet EU ETS requirements. If you are flying from or to an EU Member State and not all your flights fall under the exemptions laid down in Annex I EU ETS Directive you fall under the scope of EU ETS.

In that case it is important to formally know your administering Member State in order to assess which national law implementing the EU ETS Directive and Monitoring and Reporting Guidelines is applicable to you, and to which competent authority you have to submit your monitoring plan. Two situations can be discerned for determining your administering Member State.

If you have a valid operating licence granted by a Member State in accordance with the provisions of Council Regulation (EEC) No 2407/92 of 23 July 1992 on licensing of air carriers, the Member State which has granted the operating license will be your administering Member State. If this is the Netherlands you are required to submit your monitoring plan to the Dutch Emissions Authority and meet your EU ETS requirements. Dutch law will be applicable to you. If the administering Member State is another Member State you should contact the competent authority of that administering Member State.

If you do not have a valid operating licence granted by a Member State in accordance with the provisions of Council Regulation (EEC) No 2407/92 of 23 July 1992 on licensing of air carriers, your administering Member State will be the Member State which has the greatest estimated attributed aviation emissions from flights performed by you in the base year.
If you have started operating in the EU ETS scheme after 1 January 2006, the base year means the first calendar year of operation. In all other cases, the base year means the calendar year starting on 1 January 2006.

In case you have started operating in the EU ETS scheme after 1 January 2006, the base year has to be ended before you legally know who your administering Member State will be and to which competent authority you have to submit your monitoring plan. The European Commission’s list to be published before the 1st of February will in that case be indicative of who your administering Member State is and to which competent authority you have to submit your monitoring plan. If the list at that time specifies that the Netherlands is your administering Member State you have to submit your monitoring plan to the Dutch Emissions Authority as soon as possible. For the period that you fall under the scope of the EU ETS Directive but you do not yet know that the Netherlands is your administering Member State you have to determine your emissions with retrospective effect. To determine those emissions you can estimate your emissions based on Eurocontrol tools or tools which can process all relevant air traffic information such as that available to Eurocontrol (please see for more information section 10 MP AE Template of the Guidance).

What to do if you are on the list of aircraft operators published by the European Commission but you do not perform any activities laid down in Annex I EU ETS Directive anymore?
If you are on the list but you do not perform any aviation activities listed in Annex I EU ETS Directive anymore, you do not fall under the EU ETS scheme and you do not have any legal requirements under the national legislation of your administering Member State. You should contact the Dutch Emissions Authority as soon as possible if the Netherlands was assigned as your administering Member State. Please see also the Frequently asked questions on the administration of the list published by the Commission at its website (http://ec.europa.eu/environment/climat/aviation_en.htm).

Can you request to be transferred to another administering Member State than is indicated in the list of aircraft operators published by the European Commission?
Article 18 (a) (1) EU ETS Directive determines the administering Member State for aircraft operators. Your administering Member State is in principle the Member State that has granted you your operating license. If you do not have a valid operating licence granted by a Member State, your administering Member State will be the Member State which has the greatest estimated attributed aviation emissions from flights performed by you in the base year (the first calendar year of operation if you have started operating in the EU ETS scheme after 1 January 2006 or the calendar year starting on 1 January 2006 in all other cases). The list of the European Commission will reflect this. As your administering Member State is determined by article 18 (a) (1) EU ETS Directive you cannot be transferred to another administering Member State.

Section 1 MP AE and TK Template: Update Monitoring Plan

Are you allowed to revise your monitoring plan during the reporting period?
After you have submitted your monitoring plan, changes may occur in your operation, monitoring methodology and your procedures. If there are changes to your monitoring methodology, you have to notify this change of your monitoring plan and get approval from the Dutch Emissions Authority. Changes in you monitoring plan that do not affect your monitoring methodology do not have to be notified to the Dutch Emissions Authority. In 2010 a guidance will be published by the Dutch Emissions Authority that will indicate the changes to the monitoring methodology that need the approval of the Dutch Emissions Authority.
Do all changes to your monitoring plan have to be reported in your emissions report and tonne km report?
When submitting your emissions report and tonne km report, you are also required to list in the reports all relevant changes that occurred during the reporting period as regards your operations, as well as deviations from your approved monitoring plan.

Section 2 MP AER and TK Template: Identification of aircraft operator

How can you ensure that a lessee will hand over data on monitoring emissions and tonne km if you use a wet lease construction?
If you use a wet lease construction to carry out part of your operations, you are only responsible for monitoring and reporting emissions and tonne km if the lessee is flying under your unique ICAO designator entered in box 7 of your flight plan or your aircraft registration markings if the ICAO designator is not available (please see chapter 2 of the guidance for more information). In that case you have to make arrangements with the lessee on how the data needed for monitoring and reporting is handed over to you (i.e. in contractual arrangements).

Section 4 MP AER and TK Template: Emission sources and fleet characteristics

Are you required to submit in your monitoring plan the aircraft you expect to use for a specific time period?
You are required to provide an indicative list of additional aircraft types that you expect to operate and for which you are the aircraft operator (aircraft types operated under your ICAO designator or if this is not available your registration markings). There is no specific time period defined in legislation. This means that you have to provide details of aircraft types which are currently not part of your fleet but might be in the foreseeable future. If you cannot foresee the use of certain aircraft types based on your future plans (or historic activities in the case of leased in aircraft), then you do not have to list these aircraft types in section 4b of MP AER and TK Template (please see the guidance in section 4 (b) MP AE and TK Template).

Do you have to submit aircraft types in section 4 (b) MP AER and TK Template that will actually be used for EU ETS flights?
As it is sometimes difficult to predict for non EU aircraft operators which aircraft types will fly to the EU and which are not, you are allowed to submit additional aircraft types in section 4 (b) of the monitoring plan templates that will eventually not fly into the EU and are thus not part of the EU ETS scope. Do note that you are required to record only aircraft actually used for EU ETS flights in your tonne km and annual emissions report.

What are the implications if the estimated list of additional aircraft types in your monitoring plan is not correct?
Discrepancies between actual data on aircraft types used and the data that you have listed in your monitoring plan on additional aircraft types will not lead to non-conformities in the verification process or enforcement. Note that you are required to ensure that data on the actual aircraft types operated is recorded correctly in your internal systems and registers on a continuous basis (please see the guidance in section 4 (b) MP AE and TK Template).

What is a flight?
The term ‘flight’ means one flight sector, that is a flight or one of a series of flights which commences at a parking place of the aircraft and terminates at a parking place of the aircraft.
What is the exact time definition for EU ETS? When does 1 Jan. 2010 start and 31 Dec 2010 end? How to deal with flights starting in the year 2010 and ending in 2011?
The local time of departure of flight determines in which year the flight needs to be reported. For example if a flight departs in Toronto at 22:00 pm on 31st December 2010 and lands in Amsterdam at 11:30 am on 1st of January 2011, the flight should be listed in the 2010 emissions report and tonne km report.

Chapter 3 and Annex G Guidance: How to set up your monitoring methodology and internal procedures

What information do you have to give on the commercial software used to monitor and generate the information required in your monitoring plan?
The monitoring plan templates require you to refer to and describe several internal procedures. Chapter 3 of the guidance explains which procedures there are and how you have to capture these procedures in your monitoring plan. The guidance provides more specific information on what these procedure should regulate and contain in the relevant sections of the monitoring plan template that concern these procedures. This tells you that you are required to describe not only the name and version of the software but also what the software is doing and how data is being transferred or generated by the software. Furthermore you are required to describe the control activities you implement to ensure that the software is functioning correctly and that data gaps are being avoided.

How should you retain your primary source data? To what extent are you allowed to record those data electronically?
The MRG requires you to keep records of documentation and information relevant for EU ETS for at least ten (10) years. You are allowed to retain your data in IT systems or electronic formats (including scanned copies, electronic load data messages and electronically transferred or generated data) provided you implement measures to ensure:
- the timeliness, availability and reliability of data;
- the correctness and accuracy of data;
- the completeness of data;
- the continuity of data (to avoid data being lost and to ensure traceability of data);
- the integrity of data (data is not modified unauthorized).
These measures could be manual check whether IT system is functioning and whether aforementioned principles are met as well as control and maintenance tools built in IT system such as access control, back up, recovery, continuity planning and security. In all cases you should ensure that the data in IT systems can meet the aforementioned principles in the same way as paper- based primary source data and is of the same quality. Control activities should be implemented to ensure this. Note it is of particular importance that the primary data (for example fuel slips) end up in the IT system in the correct way. A description of control activities and procedures should be submitted in the relevant sections of your monitoring plan. If the Dutch Emissions Authority is not convinced of the effectiveness of the implemented measures and control activities, additional requirements can be imposed on aircraft operators to record and maintain non-electronic data or scanned copies.

Section 5 MP TK Template: Distance

How should you calculate distance?
Distance must be calculated using the following formula: Distance [km] = Great Circle Distance [km] + 95 km (please see section 5 MP TK Template on what is meant by Great Circle Distance). For benchmark purposes all operators must calculate distance according to the European Commission Decision on Monitoring and Reporting and you are not allowed to use actual distance.
**Which Great Circle Distance methods are acceptable?**
The Great Circle Distance is defined in the MRG as the shortest distance between any two points on the surface of the Earth, which shall be approximated by using the WGS84 ellipsoid system (referred to in Article 3.7.1.1. of Annex 15 to the Chicago Convention). The two points are the aerodrome of departure and the aerodrome of arrival (please see section 5 MP TK Template). This means:
- Spherical law of cosines and haversine formula cannot be accepted as GCD methods since they consider the earth as sphere;
- Vincenty formula can be accepted provided WGS84 coordinates and AIP data are being used.

**If you outsource the monitoring of your aerodrome location or calculation of distance (by using for example external website), how do you ensure that the quality of the data is accurate? How to ensure that the tools are able to generate accurate data?**
If you outsource the monitoring of your aerodrome location or calculation of distance you are still responsible for the calculation of the distance and the accurateness, correctness and completeness of the AIP data. You should therefore assure yourself that the quality of these processes is guaranteed (please see section 5 (c) and (d) MP TK Template in the Guidance). This means among other things that you should ensure that the third party gives you information on the source data, algorithms, formula and method used. Furthermore cross checks can be performed with tools to be developed and published by Eurocontrol.

**Section 6 MP TK Template: Payload (passengers and checked baggage)**

**Which types of passengers should be taken into account when determining the passenger payload?**
All passengers on board should be taken into account when using tier 1 (default value of 100 kg) or tier 2 (mass in mass balance documentation). This includes infants, children and dead head crew that are not on active duty (please see section 6 (c) MP TK Template).

**Should you include crew baggage in your tonne km calculations?**
Active crew has to be excluded from your tonne km calculations. This also applies to their baggage.

**How do you calculate the mass of passengers? Which sources can you use?**
The MRG states that the mass for passengers and checked baggage contained in the mass and balance documentation for each flight is used when tier 2 is chosen to calculate the mass of passengers and their baggage. This can be done in the following manner:
- Number of PAX (from any primary source such as boarding data, check in data etc.) * specific mass of PAX type (as mentioned in the mass and balance documentation for an individual passenger). The individual mass of passenger can be standard mass or actual mass as laid down in mass and balance documentation, e.g. 88 kg for male passenger. The number of passengers is taken from another source than mass and balance documentation.
- Total mass of PAX for all passengers (as stated in mass and balance documentation). This would mean that the total number and mass of passengers are taken from mass and balance documentation.

**Section 6 MP TK Template: Payload (freight and mail)**

**When should pallets and containers be excluded from the payload?**
Payload is defined in the MRG as total mass of freight, mail, passengers and baggage carried onboard the aircraft during a flight. Only the tare weight of pallets and containers that are not part of payload are to be excluded.

Containers and pallets that are Unit Load Devices (ULD’s) usually carry IATA’s marking information
like type codes, maximum gross weights and tare weight. The tare weight of these Unit Load Devices (ULD’s) shall be excluded from the reported mass of freight and mail if they are not part of the consigned freight and mail. In that case they cannot be considered as payload. ULD’s that are part of the consigned freight and mail are considered payload and could be included in the reported mass of freight and mail.

If you transport empty containers, nets and pallets, can this be included in the payload?
Generally empty containers, nets and pallets are not part of freight. However if you transport empty containers, nets and pallets from one airport to another in case of for example an overabundance at the terminal and you get paid to transport these, the empty containers, nets and pallets can be considered as freight itself and are part of the payload. In that case you can take these pallets, nets and containers into account when determining the overall payload.

What level of detail is required for describing in your monitoring plan the measurement devices used for measuring the mass of freight and mail?
A general description of measurement devices you use to measure the mass of freight and mail is sufficient. Your description should include type of weighing devices (e.g. weigh bridges, weighing platforms, etc) and, if available, state calibration standards and uncertainty margins. If you outsource weighing to ground handling service providers, you are only required to mention this in your monitoring plan. In that case you should also outline how you ensure that these measurement devices are sufficiently accurate (e.g. through clauses in contracts or otherwise). Please see for further information section 6f MP TK Template of the guidance. In addition the exemplar monitoring plans developed by the German Emissions Authority and published on the website of the Dutch Emissions Authority will give you an indication of what you have to complete in this section (http://www.emissieautoriteit.nl/english/aviation/templates-and-guidance).

Section 4 MP AE Template: Emission sources and fleet characteristics

What are the implications if you provide an inaccurate estimation of your total annual fossil CO₂ emissions in your monitoring plan?
The estimated or predicted total annual emissions figure is indicative and is only meant to give the competent authority an indication on what level of uncertainty is applicable to your operations and whether you are eligible for the simplified approach for small emitters (emitting less than 10,000 tonnes of CO₂ emissions). Discrepancies between actual data on annual emissions and the estimated figure in your monitoring plan do in principle not lead to non-conformities in verification or enforcement (please see section 4g MP AE Template).

If however the actual reported emissions compared to the estimated figure in this section indicate you are not a small emitter or you have to apply a different level of uncertainty you will have to contact the Dutch Emissions Authority. This could lead to an amendment of your monitoring plan if the respective thresholds in section 5 and 7 MP AE Template have been exceeded.

Section 6 MP AE Template: Calculation of fuel consumption

Why can’t you use fuel consumption data that you have already reported to the civil aviation authority for determining your annual emissions in EU ETS?
The MRG contain requirements on how to determine your fuel consumption. These rules are applicable to all aircraft operators falling under the scope of EU ETS. It ensures that one tonne of CO₂ is indeed one tonne of CO₂ for all participating aircraft operators.
If you opt to utilize a different data transmission/tracking process at hub cities in order to obtain more accurate information should you list this as a deviation from your general monitoring methodology?

Deviations from the general monitoring method that you have entered under section 6 (a) MP AE Template have to be listed in section 6 (g) MP AE Template. This concerns deviations that are necessary due to special circumstances at specific aerodromes or specific types of aerodromes. Data transmission/tracking process at hub cities that differ from general transmission/tracking process mentioned under section 6 (a) MP AE Template would fall under this category. Please see section 6 (g) on what you have to complete in this box and how you have to justify this deviation.

How do you have to determine the actual density if you cannot provide the fuel temperature on uplift?

If the fuel temperature on fuel uplift is not undertaken by fuel supplier and cannot be provided by you, the actual density value has to be determined according to one of other methods:

• actual density of measured fuel in tanks using on-board measurement systems;
• actual density of each fuel uplift as recorded on the fuel invoice or delivery note.

A standard density factor of 0.8 kg/litre can only be used where the actual values are not available and cannot be determined according to the three options mentioned in section 6 (d) MP AE Template (actual density by on board measurement, fuel supplier data or fuel temperature measurement during fuel uplift).

Are fuel delivery notes that contain actual density information acceptable if the corresponding analytical data is never retained and cannot be checked by you?

According to the MRG the actual density of each fuel uplift as recorded on the fuel invoice or delivery note can be used to determine the actual density value. You are not required to check the actual density information with the corresponding analytical data.

Section 7 MP AE Template: Uncertainty

What do you have to do when some aircraft types fail to meet the uncertainty requirement of 2.5% for on board measurement systems?

The uncertainty requirement of 2.5% sees to the total uncertainty of all fuel measurements over the reporting period. If an individual meter in an old aircraft type does not meet the uncertainty threshold of 2.5% this does not necessarily mean that the total uncertainty over the reporting period cannot be met.

You are not required to do a full uncertainty assessment, however if you have multiple meters with high inaccuracies you have to assess the impact of these meters on the total uncertainty to ensure that you stay below the threshold (e.g. 2.5%). For determining the impact on the total uncertainty of all these fuel measurements you have to sum up the uncertainty of all individual quantity measurements by using the error propagation formulas which can be found in Annex I, section 7.1 MRG. The error propagation law formulas show how you combine the different uncertainties if the fuel is determined by different measurement instruments (please see below for the formulas).
For example, if 25 independent meters with an uncorrelated uncertainty of 4% for each meter are used for the fuel measurements, the uncertainty of the total fuel consumption could be less than 2.5%.

If the on-board instruments cannot be made more accurate but the impact on the overall uncertainty is minor (meaning the required uncertainty threshold will not be exceeded), the tier requirements will still be met. If the inaccurate on-board instrument causes the overall uncertainty of the fuel consumption to exceed the threshold you have to take measures to avoid non compliance by using fuel uplifts provided by the fuel supplier. Usage of the inaccurate measurement data to calculate the fuel uplift is not allowed in that case (please see section 7 MP AE Template).

What type of fuel is JP 8 fuel?
JP 8 fuel is grouped with Jet A and Jet A-1 and can therefore be considered as Jet Kerosene.

Section 8 MP AE Template: Emission factors

How can you determine the net calorific value, emission factor and biogenic content of sustainable alternative fuels such as biofuels?
If aerodromes decide to offer a biofuel blend in future, aircraft operators do not in all cases have control over the selection of alternative fuel and will have difficulty to determine the net calorific value, emission factor and biogenic content. If the alternative fuel is a commercially traded fuel you can derive the net calorific value, emission factor and biogenic content from the purchasing records for the respective fuel provided by the fuel supplier (for more information on how to determine emission factors and other parameters of alternative fuels please see section 8 (b) MP AE Template).

Commerically traded fuels mean fuels of specified composition which are frequently and freely traded, if the specific batch has been traded between economically-independent parties, including all

a) For uncertainty of a sum (e.g. of individual contributions to an annual value):

for uncorrelated uncertainties:

$$U_{\text{total}} = \sqrt{(U_1 \cdot x_1)^2 + (U_2 \cdot x_2)^2 + \ldots + (U_n \cdot x_n)^2} \over x_1 + x_2 + \ldots + x_n$$

for interdependent uncertainties:

$$U_{\text{total}} = \left( \frac{U_1 \cdot x_1 + U_2 \cdot x_2 + \ldots + U_n \cdot x_n}{x_1 + x_2 + \ldots + x_n} \right)$$

Where:

- $U_{\text{total}}$ is the percentage uncertainty in the sum of product of the quantities divided by the total and expressed as a percentage;
- $x_i$ and $U_i$ are the uncertain quantities and the percentage uncertainties associated with them, respectively.
commercial standard fuels, natural gas, light and heavy fuel oil, coal, petroleum coke. You can only use the purchasing records if the net calorific value, emission factor and biogenic content have been derived based on accepted international standards.

If the biofuel blend is a de minimis source stream you can use an estimation method for determining the net calorific value, emission factor or biogenic content. The biofuel blend is a de minimis source stream if the emissions are jointly 1 kilotonnes of fossil CO2 or less per year or if the emissions contribute less than 2% (up to a total maximum contribution of 20 kilotonnes of fossil CO2 per year), whichever is the highest in terms of absolute emissions.

Section 9 MP AE Template: Small aircraft operators

What can you do as small emitter if the Commission has not approved a tool to estimate your emissions?
The Dutch Emissions Authority accepts that you refer in section 9 (a) MP AE Template to the ETS support facility van Eurocontrol. If you confirm in your monitoring plan that the tool developed by Eurocontrol is used this will be approved by the Dutch Emissions Authority even though the Commission has not yet officially approved the tool. This only applies to the aforementioned Eurocontrol tools. Other tools that have not been approved by the European commission are not accepted by the Dutch Emissions Authority.

Section 10 MP AE Template: Data gaps

Which tool can you use for data gaps if the Commission has not approved a tool to estimate your emissions?
The Dutch Emissions Authority accepts that you refer in section 10 (a) MP AE Template to the ETS support facility van Eurocontrol. If you confirm in your monitoring plan that the tool developed by Eurocontrol is used for data gaps this will be approved by the Dutch Emissions Authority even though the Commission has not yet officially approved the tool. This only applies to the aforementioned Eurocontrol tools. Other tools that have not been approved by the European Commission are not accepted by the Dutch Emissions Authority.

Chapter 1 Guidance: Allocation of free allowances

If you use low carbon alternative jet fuels on flights that are outside the scope of EU ETS, can you account for the related emission benefits under EU ETS?
The EU ETS Directive and MRG do not allow you to do this. You are required to report only fuel that is consumed in EU ETS flights that are covered by Annex I EU ETS Directive (excluding the exempted flights).

Can you claim credit for using alternative fuels if you are forced to sell the alternative fuel at market rates because it cannot be used on your flights?
You cannot claim credit in these cases. You are required to report only fuel that is consumed in EU ETS flights that are covered by Annex I EU ETS Directive (excluding the exempted flights).

What measures can you take if you have a disproportionally low traffic volume in 2010 because of economic crisis but recover later?
If you have a disproportionally low traffic volume in 2010 and your tonne km increases by an average of more than 18% annually between 2011 and 2014 you are entitled to extra allowances from the special reserve provided the additional activity is not in whole or in part a continuation of an aviation
activity previously performed by another aircraft operator. To apply for a free allocation of allowances from special reserve you have to hand in an application by 30 June 2015 and monitor and report your tonne-km over 2014. In due time the Dutch Emissions Authority will publish more information about the application procedure for the special reserve.

Confidentiality

How can the confidentiality of your emissions and tonne km data be guaranteed?
The information submitted in your monitoring plans and emissions/ tonne km report will be subject to public access to information requirements laid down in the Environmental Management Act and the Public Access to Information Act which implements the Arhus convention and European Directive 2003/4/EC on public access to environmental information. If you consider that any information you provide in connection with your monitoring plan or emission/ tonne km report should be treated as commercially confidential, please let the Dutch Emissions Authority know by specifying in your Monitoring Plan and emission/ tonne km report which information you regard as confidential. You should be aware that under the provisions in the Environmental Management Act and the Public Access to Information Act which implements Directive 2003/4/EC, the Dutch Emissions Authority may be obliged to disclose information even where you request that it is kept confidential. Please also note that emission data cannot be withheld by the Dutch Emissions Authority pursuant to Arhus Convention and European Directive 2003/4/EC on public access to environmental information.

Reporting

Are you required to use the template for annual reporting and tonne km data published by European Commission?
You are required to use the template published on the Commission’s website. However you can submit the data in section 9 (b), 9 (c), 9 (d) and 10 MP AE Template in another format or annex to the report if this concerns the same data and the accessibility of the data is equal to the data that would have been submitted in the MP template. This also applies to the data in section 5 and 6 MP TK Template.

What are the MRG requirements concerning significant number of digits for elements such as fuel uplift, density and freight?
According to Annex XIV MRG emissions shall be reported as rounded tonnes of CO2. Emission factors shall be rounded to include only significant digits both for emission calculations and reporting purposes. Rounding emission factors is only possible if this does not lead to deviation in the calculation of tonnes of CO2 emissions and does not lead to a different emission figure. Fuel consumption per flight shall be used with all significant digits for calculation and can in principle not be rounded.

According to Annex XV MRG tonne-kilometres shall be reported as rounded values of [t km]. All data per flight shall be used with all significant digits for calculation.